

WHAT IS CLAIMED IS:

1. A method for color adjustment by entering image data which expresses an input image in terms of color component value for a large number of pixels individually and then generating adjusted image data which expresses an adjusted image to be printed by a printing apparatus, with the input image color-adjusted, said method comprising:
a step of outputting a preview image of said input image according to said image data and acquiring information about the unadjusted color which expresses the color to be adjusted and which is contained in said preview image;
a step of controlling said printing apparatus such that it prints a plurality of colors among from the color and its neighboring colors represented by said information about unadjusted color, according to said information about unadjusted color which has been acquired;
a step of specifying the information about adjusted color which represents any of the plurality of printed colors, as the standard information at the time of color adjustment;
and
a step of generating the data for adjusted image which expresses the adjusted image to be printed by said printing apparatus from said image data, according to said information about unadjusted color and said information about adjusted color.

2. The method for color adjustment as defined in Claim 1, wherein:

said step for acquiring unadjusted color outputs said preview image of adjusted image according to said adjusted image data and acquires the information about the unadjusted color to be adjusted which is contained in said preview image;

said step for controlling the printing of neighboring colors controls said printing apparatus such that it prints a plurality of colors among from the color and its neighboring colors represented by said information about unadjusted color, according to said information about unadjusted color which represents the color contained in the preview image of said adjusted image;

said step for specifying adjusted color specifies the information about adjusted color representing any of a plurality of said printed colors; and

said step for generating adjusted image generates the adjusted image data to be printed by said printing apparatus from said image, according to said information about unadjusted color and said information about adjusted color.

3. The method for color adjustment as defined in Claim 1, wherein:

said information about unadjusted color is the unadjusted color component value which represents the color component value of the color to be adjusted and which is contained in said preview image;

said information about adjusted color is the information which denotes the difference between the color component

value representing any of said plurality of printed colors and said unadjusted color component value; and said step for generating adjusted image obtains the adjusted color component value which represents any of said plurality of printed colors from said unadjusted color component value and said information about adjusted color and generates said adjusted image data from said image data such that the unadjusted color component value is made the adjusted color component value.

4. The method for color adjustment as defined in Claim 1, wherein said step for acquiring unadjusted color causes an image display apparatus to display said preview image, references the standard color profile which makes it possible to correct the difference in color of the displayed image of the image displaying apparatus and the printed image of the standard printing apparatus, and causes the image display apparatus to display the preview image corresponding to the printed image of the standard printing apparatus according to said image data, while referencing the standard color profile which makes it possible to correct the difference in color of the displayed image of the image displaying apparatus and the printed image of the standard printing apparatus.

5. The method for color adjustment as defined in Claim 1, wherein said step for acquiring the unadjusted color outputs the preview image of said input image in an enlarged form, with colors separated for each pixel, and

acquires said information about unadjusted color which represents the color to be adjusted and which is contained in the color which has been output in separate colors.

6. The method for color adjustment as defined in Claim 1, wherein said image data is the data to express in terms of more than one kind of color component value representing respectively more than three elemental colors, and the step for controlling the printing of neighboring colors causes the printer to print a color chart (in a honeycomb pattern) in which different elemental colors change step-wise in three directions from the center which is the color or its neighboring colors which is represented by said information about unadjusted color.

7. The method for color adjustment as defined in Claim 1, in which a step is added which generates the varying region image data which represents the varying region image which shows the region in which the color changes due to said color adjustment in correspondence to said input image based on the information about unadjusted color and the information about adjusted color and outputs the varying region image based on the varying region image data, and said step for generating the adjusted image generates the adjusted image data which expresses the adjusted image to be printed by said printing apparatus from said image data based on the information about unadjusted color and information about adjusted color which have generated the varying region image data which expresses said varying

region image which has been output.

8. The method for color adjustment as defined in Claim 7, in which said step for acquiring unadjusted color causes the image display apparatus to display said preview image and said step for outputting the varying region references the color profile which makes it possible to correct difference in color between the display image on said displaying apparatus and the printed image of said printing apparatus, thereby generating the print image data which expresses the print image to be printed by said printing apparatus from said image data, generates said adjusted image data from said image data based on said information about unadjusted color and said information about adjusted color, and generates said varying region image data based on the difference between the print image data and the adjusted image data.

9. The method for color adjustment as defined in Claim 8, in which said step for outputting the varying region generates said varying region image data in which the component value is the difference in component value between said print image data and said adjusted image data.

10. The method for color adjustment as defined in Claim 9, in which said image data is the data which expresses in terms of more than one kind of color component value, and said step for outputting the varying region obtains the component value expressing achromatic color from the difference in component value between said print

image data varying in kind and said adjusted image data, and generates said varying region image data expressed in terms of said component value.

11. A method for color adjustment by entering image data which expresses an input image in terms of color component value for a large number of pixels individually and then generating adjusted image data which expresses an adjusted image to be printed by a printing apparatus, with the input image color-adjusted, said method comprising: an unadjusted color acquisition step for acquiring information about the unadjusted color which expresses the color to be adjusted and which is contained in said input image according to said image data; an adjusted color specifying step for accepting input of information about adjusted color which expresses the adjusted color for the color expressed by said unadjusted color information; a varying region output step for generating the varying region image data which expresses the varying region image which shows the region in which the color changes due to said color adjustment on said input image based on the information about unadjusted color and the information about adjusted color; and an adjusted image generating step for generating the adjusted image data which expresses the adjusted image to be printed by said printing apparatus from said image data based on said information about unadjusted color and said

information about adjusted color which have generated the varying region image data which expresses said varying region image which has been output.

12. A print control apparatus which enters an image data which expresses an input image in terms of color component value for a large number of pixels individually and then causes a printing apparatus to print the adjusted image, which is a color-adjusted input image, said apparatus comprising:

an unadjusted color acquisition unit which outputs the preview image of said input image based on said image data and acquires the information about unadjusted color which expresses the color to be adjusted and which is contained in said preview image;

a neighboring color print control unit which performs control such that said printing apparatus prints more than one color among from the color and its neighboring colors expressed by said information about unadjusted color based on said information about unadjusted color which has been acquired;

an adjusted color specifying unit which specifies the adjusted color information which expresses any one of said plurality of printed colors as the standard information at the time of color adjustment;

an adjusted image generating unit which generates the adjusted image data which expresses the adjusted image to be printed by said printing apparatus from said image data

based on said information about unadjusted color and said information about adjusted color; and
a control unit which causes said printing apparatus to print the adjusted image based on said adjusted image data which has been generated.

13. A color adjustment apparatus which enters an image data which expresses an input image in terms of color component value for a large number of pixels individually and then causes a printing apparatus to print the adjusted image, which is a color-adjusted input image, said apparatus comprising:

an unadjusted color acquisition unit which outputs the preview image of said input image based on said image data and acquires the information about unadjusted color which expresses the color to be adjusted and which is contained in said preview image;

a neighboring color print control unit which performs control such that said printing apparatus prints more than one color among from the color and its neighboring colors expressed by said information about unadjusted color based on said information about unadjusted color which has been acquired;

an adjusted color specifying unit which specifies the adjusted color information which expresses any one of said plurality of printed colors as the standard information at the time of color adjustment; and

an adjusted image generating unit which generates the ad-

justed image data which expresses the adjusted image to be printed by said printing apparatus from said image data based on said information about unadjusted color and said information about adjusted color.

14. A color adjustment apparatus which enters an image data which expresses an input image in terms of color component value for a large number of pixels individually and then causes a printing apparatus to print the adjusted image, which is a color-adjusted input image, said apparatus comprising:

an unadjusted color acquisition unit which acquires the information about unadjusted color which expresses the color to be adjusted and which is contained in said input image based on said image data;

an adjusted color specifying unit which accepts the input of the information about adjusted color which expresses adjusted color for the color expressed by said information about unadjusted color;

a varying region output unit which generates the varying region image data which expresses the varying region image which shows the region in which the color changes due to said color adjustment on said input image based on said image data, the information about unadjusted color, and the information about adjusted color, and outputs the varying region image based on said varying region image data; and
an adjusted image generating unit which generates the adjusted image data which expresses the adjusted image to be

printed by said printing apparatus from said image data based on said information about unadjusted color and said information about adjusted color which have generated the varying region image data which expresses said varying region image which has been output.

15. A color adjustment program product which gives a computer the function which enters an image data which expresses an input image in terms of color component value for a large number of pixels individually and then generates the adjusted image data which expresses the adjusted image to be printed by a printing apparatus, with the input image color-adjusted, said program product allowing the computer to realize:

an unadjusted color acquisition function which outputs the preview image of said input image based on said image data and acquires the information about unadjusted color which expresses the color to be adjusted and which is contained in said preview image;

a neighboring color print control function which performs control such that said printing apparatus prints more than one color among from the color and its neighboring colors expressed by said information about unadjusted color based on said information about unadjusted color which has been acquired;

an adjusted color specifying function which specifies the adjusted color information which expresses any one of said plurality of printed colors as the standard information at

the time of color adjustment; and
an adjusted image generating function which generates the adjusted image data which expresses the adjusted image to be printed by said printing apparatus from said image data based on said information about unadjusted color and said information about adjusted color.

16. A color adjustment program product which gives a computer the function which enters an image data which expresses an input image in terms of color component value for a large number of pixels individually and then generates the adjusted image data which expresses the adjusted image to be printed by a printing apparatus, with the input image color-adjusted, said program product allowing the computer to realize:

an unadjusted color acquisition function which acquires the information about unadjusted color which expresses the color to be adjusted and which is contained in said input image based on said image data;

an adjusted color specifying unit which accepts the input of the information about adjusted color which expresses adjusted color for the color expressed by said information about unadjusted color;

a varying region output function which generates the varying region image data which expresses the varying region image which shows the region in which the color changes due to said color adjustment on said input image based on said image data, the information about unadjusted color, and the

information about adjusted color, and outputs the varying region image based on said varying region image data; and an adjusted image generating function which generates the adjusted image data which expresses the adjusted image to be printed by said printing apparatus from said image data based on said information about unadjusted color and said information about adjusted color which have generated the varying region image data which expresses said varying region image which has been output.